

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shawn Doman on 3/12/2009.

The application has been amended as follows:

1. A method comprising:

detecting a failure of a first virtualization device of a storage area network interconnect, wherein

said storage area network interconnect is coupled to a metadata host,
said metadata host is configured to maintain metadata associated with said first virtualization device, said metadata host is configured to monitor a heartbeat signal from a plurality of virtualization devices, and

said first virtualization device is associated with a unique interconnect device identifier, wherein

the unique interconnect device identifier is sufficient to identify ~~identifies~~ a virtualization device with which the unique interconnect device identifier is associated, and

the unique interconnect device identifier is configured to identify the virtualization device as a target of a data transfer request; and

associating said unique interconnect device identifier with a second virtualization device of said storage area network interconnect in response to said detecting, wherein said associating comprises modifying said metadata.

11. A machine-readable medium storing a plurality of instructions executable by a machine embodied therein, wherein said plurality of instructions when executed cause said machine to perform a method comprising:

detecting a failure of a first virtualization device of a storage area network interconnect, wherein

said storage area network interconnect is coupled to a metadata host,

said metadata host is configured to maintain metadata associated with said first virtualization device, said metadata host is configured to monitor a heartbeat signal from a plurality of virtualization devices, and

said first virtualization device is associated with a unique interconnect device identifier, wherein

the unique interconnect device identifier ~~is sufficient to identify~~ identifies a virtualization device with which the unique interconnect device identifier is associated, and

the unique interconnect device identifier is configured to identify the virtualization device as a target of a data transfer request, and

associating said unique interconnect device identifier with a second virtualization device of said storage area network interconnect in response to said detecting, wherein said associating comprises modifying said metadata.

21. A data processing system comprising:

means for detecting a failure of a first virtualization device of a storage area network interconnect, wherein

said first virtualization device is associated with a unique interconnect device identifier, wherein

the unique interconnect device identifier ~~is sufficient to identify~~ identifies a virtualization device with which the unique interconnect device identifier is associated, and

the unique interconnect device identifier is configured to identify the virtualization device as a target of a data transfer request,

said storage area network interconnect is coupled to an application host, a metadata host, and to a storage device,

said metadata host is configured to maintain metadata associated with a virtual storage element,

said metadata host is configured to monitor a heartbeat signal from a plurality of virtualization devices,

said first virtualization device is configured to present said virtual storage element to said application host using a host device identifier, and

said virtual storage element comprises at least a portion of said storage device; and

means for associating said unique interconnect device identifier with a second virtualization device of said storage area network interconnect coupled to said means for detecting, wherein said associating comprises modifying said metadata.

28. A data processing system comprising:

a metadata host, wherein the metadata host comprises:

a monitor module to monitor a communications link for a heartbeat signal from a first virtualization device of a storage area network interconnect,

wherein said first virtualization device is associated with a unique interconnect device identifier, wherein

the unique interconnect device identifier is sufficient to identify ~~identifies~~ a virtualization device with which the unique interconnect device identifier is associated, and

the unique interconnect device identifier is configured to identify the virtualization device as a target of a data transfer request; and

a failover module coupled to said monitor module to detect a failure of said first virtualization device and to associate said unique interconnect device

identifier with a second virtualization device of said storage area network interconnect in response to said detecting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES EHNE whose telephone number is (571)272-2471. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

